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ABSTRACT

Taiwan's commercial high schools are 3-year institutions that students enter after successfully passing a rigorous vocational, technical, or commercial school admission examination. Although commercial high schools date from the early days of Japanese occupation in 1895, the modern-day Chinese commercial high school did not come into being until 1945. Unlike technical/vocational schools, commercial high schools focus on areas of study that are both academic and relevant to the world of office work, language, computers, international business, and other commercially important areas. Taiwan currently has 106 commercial high schools serving 197,000 students. Commercial high schools may be set up and run by the government or private investors under the direction of a board of trustees and the administration of a principal with an average of 20 years in public education. Eighty-five percent of graduates of commercial high schools find immediate employment. As is the case in other components of Taiwan's educational system, prolongation of the childhood experience is on the agenda of Taiwan's educational authorities. Although commercial high schools have always played an important role in Taiwan's economic development, the issue of how they can make an even greater contribution to the nation's economic prosperity has become a major concern. (Contains 40 references.) (MN)

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WORK FORCE DEVELOPMENT

The Chinese Commercial High School in Taiwan As a Vehicle for Economic Development

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2000

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Errors that appear in fact and/or interpretation are the responsibility of the author.

This book is dedicated to the memory of:

George Curtis Engel
1905-1998

Douglas C. Smith
Fall, 1999

FOREWORD

An Analytical Interpretation of
Modern Taiwan's Educational Legacy and Current State

Over the past twenty years an interesting phenomenon has occurred, with which most of us in education are familiar. Those nations in East Asia, particularly Korea, Hong Kong, Taiwan, Singapore, and, to a lesser degree, the provinces on the east coast of the Chinese mainland—that is, those cities and regions that are on the Pacific—have shown extremely high educational achievement. The International Assessment of Educational Progress, which was administered in 1996 by the Educational Testing Service to 13-year-olds throughout the world, placed Taiwan and Korea as being first of all nations in mean scores in both science and math. Recent evidence indicates that both Hong Kong and Singapore, as well as the cities of Beijing, Shanghai, Nanking and Tientsin, also are in this elite leadership group in math and science.

It is hard to understand why these countries have done so well in developing students who have literally blown the top off of math and science examination. Historically, East Asia has not emphasized mathematics and science. Rather, history, literature, art, and the humanities have always been the traditional forte of the Confucian intellectual. However, since the early 1960's, a change has occurred which has allowed children from Taiwan, Japan, and South Korea to be among the best on Earth in mathematical and scientific talents. Perhaps we can trace the academic achievement of the young people of East Asia to Confucianism, which places high regard on strong family values, hard work, thrift, and an infatuation with education. Whatever, the academic success of the East

Asian school system has been made possible by a complex interaction of family values, governmental policy, economic gains, historical and philosophical dynamics, and a desire to achieve personal status through knowledge and scholarship.

In Taiwan the educational paradigm that we see today is a melding of three different value systems. The first can be referred to as the traditional Confucian ideal that has been present throughout Chinese history. It was Confucius' view that moral behavior was governed by relations and respect. Consequently, a son would respect his older brothers, his mother, and his father; older people would likewise control and help their children. Citizens would revere their government leaders, and the leaders, because they were the elite of the society, would treat the populace with fairness and dignity. The basis of Confucius' educational view is that education knows no class distinction and does not therefore discriminate. During the Han period (200 B.C.–200 A.D.), Confucianism became the dominate intellectual force in Chinese society and was studied by all who hoped to matriculate into government positions. It was during this era that the first state-supported academies evolved. It was also in the Han Dynasty that the earliest competitive examination system can be seen. Competitive examination as a means of upward mobility served two purposes: (1) it ended the nepotism that China had had previously as the only way of selecting leaders of the society, and (2) it assured the Emperor a cadre of scholar-civil servants always available to take on the responsibilities of directing the institutions of the nation.

Laid over this traditional Chinese ideal we can see the Japanese influence on Taiwan, an island that was under colonial rule by Japan from 1895 to 1945. It was the goal of the Japanese to make Taiwan into a showcase colony. The brutalities that the

Japanese exhibited in Korea and throughout southeast Asia during their period of imperialistic expansion was much milder on the island of Formosa. Japanese policy was to train the people of Taiwan to be more efficient and to be obedient to their colonial masters. In doing this, an energized education system was put into place in Taiwan during the 1920's, and it lasted until 1945. Taiwanese students who were high achievers were given scholarships to attend the best universities in Japan and then to return to Taiwan in leadership positions. Though the Japanese rulers did demand loyalty to the emperor and to the empire, they also recognized the superiority of Chinese civilization as it was being played out on the island of Taiwan during their period of occupation.

The third feature is, of course, the Americanization of education in Taiwan. After the fall of mainland China to the communists in 1949, the Chinese in Taiwan looked to the United States as their protector and their patron. The school system that eventuated on the island of Formosa in many ways resembled that which existed in the United States in the 1930's and 1940's. The major departure was the reliance on competitive examinations at all junctures in a person's educational and professional life, a feature that has been present in Chinese history for 2000 years. However, teaching methods, the school administration system, funding, testing, and the general milieu that helps define education in Taiwan, all are surprisingly similar to what is seen in the American schools of the same period.

The one major departure from the American model, however, can be seen in the high reliance on standardized national examinations which continually narrow the conduit as a student moves up the educational system. Yet this system does assure that the best, most hardworking, and brightest youngsters eventuate to the finest high schools, colleges, and universities. The exam system is fair, if highly draconian, and does offer all in Taiwan

society the sense that equal opportunity to academe and the good life are possible. It is a system that retains Confucian idealism, Deweyan practicality, and modern methodologies and materials of the West.

Study of the Confucian classics was the foundation of Chinese education during the Ching Dynasty (1644–1912). However, as China became aware of Western scientific developments and scholarship, a movement away from purely philosophical studies was begun. Confucianism was never abandoned; rather this philosophy and those ideas of the scientific West were often concurrently studied by the Chinese intelligentsia. Some have suggested that the great emphasis placed on Confucianism at this juncture in Chinese history, when the West was challenging China's territorial and legal integrity, slowed down that nation's political and economic growth. Perhaps a better and more accurate view is that China, in this age when the Western nations were making great scientific progress, chose to emphasize its historical legacy and strengths at the expense of scientific and empirical advancements. One must remember that China for the preceding two thousand years was far in advance of Europe as a civilization; to change the pattern of life that had given China its splendor was antithetical to those in the ruling elite, most of whom had achieved their positions through the traditional means. At this time Chinese scholars were making contact with their counterparts in Japan, Europe, and particularly America.

Even with the turmoil that characterized the last years of the Ching Dynasty and much of the 20th century, China attempted at times valiantly and at other times vaingloriously to bring about educational opportunity to its people. So ingrained in the psychology of the Chinese is the value of education that it is often characterized as the true religion of the people.

> For the moment, maybe, the Western impact has driven Confucius from his millennial throne; yet even if he has been officially deposed, the unconquerable sage is still contriving to govern where he no longer reigns . . .
>
> — Arnold Toynbee

Though the ideals that Confucian thought expounded emphasized that education would be class-neutral, the great challenges of the aforementioned examination (which prevails to this day throughout East Asia) and the indulgent behavior of Chinese parents towards their student-child has created a problem. Many children who achieve well in the educative system become in the eyes of their parents and in their own minds "little emperors." Daily household tasks, creative and wholesome after-school recreation, and youthful socializing are distantial from these students who wish to please their parents and honor their families. Unfortunately this superciliousness frequently carries over into adulthood. The scholar-class as well as those who owe their business, legal, commercial, or medical successes to the Chinese education system see themselves as a group apart from the mainstream of Taiwan life. Those who achieve success in business sans an advanced university education often will display their wealth symbolically to emulate the scholar-gentry or to prove to their families or peers that the Chinese educational paradigm was errant: that the school and examination system were not in step with the realities of the modern society in which they live.

An interesting issue that is tangential to my discussion of modern education in Taiwan is the relationship that I believe exists between Confucianism and the principles of democracy. Taiwan has moved from an authoritarian society (both during the Japanese occupation and the thirty years after 1949) to a modified parliamentary/ democratic society.

The efforts of the late president, Chiang Ching-Kuo and the current president, Lee Tung-Hwa, have seen an end to marshal law and the emergence of fundamental principles of democratic rule. Many factors account for this: Taiwan has become a major economic power with large investments throughout the world and with numerous developed nations having financial interests in the island republic: the United States has indicated that it will not allow communist China to use military force to retake the island province; and the mainland (though few from Beijing would admit this) benefits greatly as an economic and trade partner with Taiwan. An equally important, yet less obvious factor in Taiwan's movement toward democratic political institutions can be found in China's misty past. Confucian thought, as interpreted by Mencius and others, has a significant element of democratic/egalitarian philosophy built into it.

The education and examination model is only one example of this. A subtle democratic process has been developing through the centuries in China. The advent of a new dynasty and new emperor gave the nation strong, fresh blood. The ills of the past dynasty were redressed. The new emperor rose from the ranks of the people and stayed in power through personal leadership and personality. His emergence was due to his own will and efforts, in a Darwinian competitiveness essentially democratic. Though the Civil Service of China would not change dramatically when a new ruler came to power, the aforementioned examination system assured a competitive environment which was democratic: all had an equal chance to reach a level of success. One could suggest that the traditional Civil Service model of China was even more democratic in terms of selection than what is found in either England or the United States.

During the dynastic period (and even to this day) another democratic element can be seen in Chinese society--the family system. Family life had built into it Confucian ideals

of relationality. Grandparents, parents, sons and daughters, peers, and even infants were part of a pre-determined constellation. The rules for behavior and respect were understood early on. One can suggest that an unwritten constitutional framework, for all members of society, was part of family-life. There does exist in all democratic institutions both constitutional guarantees and constraints of individual behavior and of unrestrained authority. These values found in the family have become a basis for political thought in Taiwan.

Openness is another quality of democratic society. China has always been surprisingly open. Opinions of people were well known as was their behavior. It would have been impossible to keep a secret in traditional China. A cruel man who beat his children and wife or a person who did not show respect to his elders would be the talk of the community. Democratic societies require a certain openness in information. This gives the populous the opportunity to evaluate and come to conclusions. Traditional Confucian life promoted open discussion of most issues. Even today in modern Taiwan a formal and an informal communication network exists between friends and family members. This openness, found in traditional China, is part of the democratic process developing in Taiwan.

Taiwan has changed dramatically since the mid-1970's when I first began my teaching, research, and writing on China. Democratic institutions--many of which can trace their provenance to Confucian thought--are replacing the authoritarianism of the past. Taiwan may be the model chosen by mainland China as it moves away from communism and towards a more enlightened form of governance.

Seldom has any large group of mankind been so prosperous and so nearly contented as were the Chinese under this governmental machinery when it was dominated by the ablest of the monarchs.

Dr. K. S. Latourette
The Chinese: Their History and Culture (1934)

Douglas C. Smith
Taipei, Taiwan
June 1999

Chapter 1

The Chinese Commercial High School in Taiwan: An Historical Analysis

Abstract

The theme of this essay is an attempt to explore the relationship between Taiwan's economic success and its expansion of educational opportunity and academic quality. The vehicle for this thesis is a detailed analysis of the Chinese commercial high school in contemporary Taiwan. Also discussed are cultural, historical and sociological features that have influenced educational policy and practice as well as economic development in the Chinese island republic.

A. INTRODUCTION

This article, which is part of a series that I embarked on twenty-five years ago, will address the Commercial High School in contemporary Taiwan, Republic of China. To date I have written thirty articles and seven books on Asian education, philosophy and family life. This compendious essay follows that pattern of my previously published efforts. It must be noted that as is the case with all of Taiwan's educational institutions ultimate control of quality, certification, graduation requirement, faculty credentialing, facilities, entry requirement and funding falls under the Ministry of Education, which is located in Taipei City. Under the Ministry of Education is the Department of Vocational, Technical and Commercial Education. This agency has the responsibility of overseeing these secondary education entities be they national, provisional, municipal or private. Graduates from any and all vocational, technical and commercial high schools are assured that the educative experience they received while attending these tertiary schools is of the highest quality and that admission standards, pedagogic activities and graduations requirements are

essentially equal.

Some of the commercial high schools, which this paper will address, are merged with technical/vocational schools: others are essential free standing and focus on career educations in the burgeoning field of commerce.

This paper will take the reader from the general to the specific. Both the issue of methodology and a general discussion of administrative structure begin the study. An historical analysis of Taiwan society education and economics will follow. It is hoped that those who are unfamiliar with Taiwan may gain a glimpse of that societies successful struggle for educative and financial solvency.

Following this portion of the manuscript the modern commercial high school (a subject not addressed in the English or European languages) will be described, analyzed and interpreted.

I do wish to mention that the notion of a commercial high school differs significantly from the technical/vocational high school model which, in many ways is quite similar to what we have in the United States and Canada. The commercial high school is a uniquely Chinese institution found exclusively in Taiwan. (Similar private centers are also found in Japan and Korea). Though the roots for the commercial high school go deep into Taiwan's history, these schools today are addressing both economic and education issues necessary for the island republic to continue its growth and development.

B. METHODOLOGY

Field-based research accounts for much of the information in this essay specific to the commercial high school in Taiwan. Four weeks (during the spring, 1999) were spent

visiting schools from Taipei to Taichung to Tainan to Ping-Tung to Kaoshuing. Interviews were held with senior administrators at the Ministry of Education in Taipei, with principals, teachers and with students.

Written materials on the commercial high school are wanting. The Ministry of Education provided statistical data and also seven important booklets. These booklets describe in great detail all aspects of the seven curriculums that are included under the title: Commercial High School Education. The best work in English on this general topic is titled "Vocation and Technical Education in Taiwan" and was prepared by Dr. Kirby Chaur-shin Yung and Frederick G. Welch. It appears in my tome The Confucian Continuum (1991). Though the commercial high school is not discussed by Professor Yung and Welch the economic and political changes that have occurred in Taiwan over the past fifty years that have enhanced education are presented both clearly and in detail. I have relied on their chapter as well as the other aforemention publications and interviews for the development of my essay.

One constraint to objectivity that exists when a foreign scholar does field-based research is the cohort of person he meets and from whom he gains information. It is necessary to work closely with the education elites of Taiwan to acquire an understanding of that society. They, by the definition of "elites," are those who have been successful and are in positions of power and influence. A natural, positive bias is always present when one deals with this class, be they in Shanghai, Tokyo, Moscow, Paris or Washington. The nasty aspects of an educative system (if indeed there are any) are either not discussed or, through the use of ponderous academic obfication, trivialized or passed over to such a degree as to be invisible to the scholars from afar.

C. ADMINISTRATION

Organizational Chart: The Commercial High School

Centralization dominates all aspects of education in Taiwan. Not only is this true of the central government, it is also the case at the public and private schools that dot the island. Perhaps the arrangement of the Chinese family, with its patriarchal constellation of rule (which is reflected in the Chinese hierarchal government), is the fundamental reason why schools, be they the most advanced university or the commercial high school, share a strong, centralized administrative organization. As one researcher suggested, the school is a place where children learn not only subject matter, but also the political and social mores of their society (Wilson, 1970). The public and private schools are arranged quite similarly to the government in Taiwan, and the principal takes on the symbolization of the head of state. We in the West may see this as incompatible with certain freedoms that are expected in our societies; however, the Chinese find this system most compatible with their

heritage and the current sociology of Taiwan.

In this section, the administration of the Chinese commercial high school in Taiwan is described. All commercial high schools are arranged in quite the same fashion; and administrative duties are also the same, irrespective of where in Taiwan the commercial high school is located. Consequently, a composite commercial high school administrative model is outlined in above; it is based on diagrams and position descriptions of three different commercial high schools (public and private) which, though different in minor procedural matters, are essentially identical (see chart).

In the private commercial high schools, a broad of trustees selects the principal and all other administrators, and teachers must be approved by this board. All professional employees must have governmental certification to seek employment. Further, in the public and private commercial high schools, heading each division under the principal is a director who has line authority and reports to the principal. Directors of instruction usually come from the field of teaching and have earned the respect of their peers and superiors through excellence in academic preparation and good human relations. The director of discipline quite often is a retired military person who has taken advanced training in pedagogy and counseling, while the chief of general affairs is often from a background in finance or economics.

The main commercial high school administrator is the principal, who is generally an experienced and older educator who took the necessary postgraduate study to receive a government endorsement as principal. The average age for commercial high school principle in Taiwan is about fifty, and most have spent twenty years in public education. A majority have received all or part of their education at National Taiwan Normal University in Taipei (the leading teacher's college on the island), Kaohsiung Teachers University, or

Taiwan Teachers College of Taichung. My interviews indicated that most principals are married and have three children who, like them, are in, or plan to go into, academic/civil service careers. The main duty of the principal is to provide advice and guidance to the teachers, attend to the necessary paperwork, and assure a safe and healthy environment for the students. The principal also symbolizes through his or her behavior and energy to the school and society, the finer aspects of Chinese education. A principal, though given intensive workshop training to get the job, is not trained in managerial skills. Therefore, his or her advice is of necessity subjective; the principal will generally be most comfortable giving orders or transmitting information from the local department of education or the Ministry of Education.

The main duties of the commercial high school principal can be seen as the following.

1. Representing the school with visitors, parents, and educational superiors.
2. Dealing with teachers and administrators in regard to personnel matters, such as grievances, in-service release time, class location, and scheduling concerns.
3. Working with parent groups and other civic organizations for the benefit of the school.
4. Assuring a safe, disciplined environment for learning.
5. Planning capital improvements in the school.
6. Opening the school day with speeches.
7. Overseeing the internal operations of the school, such as equipment orders and textbook dispersal.
8. Acting as advocate for the school with the governing bodies in the public or private sector.

In essence, the principal represents the link between the various constituents of society interested in the school, the educational hierarchy, and the school and its

personnel and charges. He or she is responsible for the regularity of the school's educational work, its order, and everything that happens within the school building. The principal's responsibility extends over general administration, relations with the pupils and their parents, pupil evaluation, counseling and guiding the teachers as a group and individually, public relations and school maintenance. The role is that of a symbolic parental figure for students, teachers, and parents, and the position is held in great respect in Chinese society in Taiwan.

Both the Ministry of Education and the Department of Vocational Education have supervisors/specialist and special unit division coordinators who work with the schools and who, like other staff persons, coordinate financial, curriculum, and personnel concerns for the central bureaucracy. The principal, however, retains ultimate authority in the school and sets the social, moral and intellectual standards for the campus.

To many individuals, teaching is a sacred calling. Far more so than in America today, this philosophy prevails in modern Taiwan. In this section, the life of the commercial high school teacher will be discussed.

A distinct teaching shortage faced Taiwan in the 1950's due to international problems, the vacancies created by the expulsion of the Japanese in 1945-1946, the desire of the national government to make Taiwan a model for all Chinese people, and a variety of economic problems. Teachers were recruited from a variety of sources. Many ex-service personnel found their way into the profession; and individuals with good educations, limited employment prospects, and no training in modern pedagogy were frequently hired.

Today, teachers in Taiwan at all levels are among the best trained in their profession in any developed nation East or West. (Smith, In the Image of Confucius, 1984)

D. THE HISTORICAL-SOCIOLOGICAL CONTEXT

Taiwan is an island province of China. Its historical, social, economic, and political evolution cannot be separated from this basic fact and these phenomena must be viewed in the context of an island society. Limited land space, rugged and majestic mountains, excellent seaports, and dense yet isolated populations are the dominant features of Taiwan. The size of Taiwan would compare roughly with the state of West Virginia. Its shape is similar to a huge tobacco leaf with a range of mountains, not dissimilar to the Appalachians, running down the spine. Numerous rivers run from the mountainous center to the seacoast.

Taiwan is located on the Tropic of Cancer, hence its climate is quite mild. The northern part of the region - the area in which Taipei is located - is a good deal cooler than the southern area where the second largest city, Kaohsiung, is found. In the winter months Taipei can be in the low 50 degrees; Kaohsiung at the same time will be in the mid-70's. The summer months are hot and humid with the temperature reaching the 90's on a regular basis. Humidity is also rather high in both winter and summer, yet a cool breeze is a common feature of the island which is located in the same ocean stream that bathes the nation of Japan (700 miles north of Taiwan). Located between Japan and the Philippines and some 250 miles off the coast of Hong Kong and Shanghai, Taiwan plays an important part in the economic and military strategies of Asia.

Numerous peoples have been lured to Taiwan and these groups have played a distinct part in its cultural and historical development. Malayan aborigines, Chinese, Spanish, Dutch, Japanese, and Americans have all either dominated or influenced the island. Historically the island must be considered part of the civilization of China. This is

not said in a political framework; rather the overwhelming number of peoples, their language, cuisine, institutions, ethnological posture, and generally their sympathies tie them closely with the mainstream of Chinese civilization and culture.

The peoples of Taiwan today, most of whom were born after 1945 and hence have few direct ties with the Mainland, represent the melting-pot syndrome that we in the U.S. have attempted to develop. Taiwan's population is over 22 million, of which about 9 percent or some two million are "Mainlanders." This term is not used now as much as it was in the past. It refers to those Chinese who came to Taiwan after 1945 when the island was returned from Japan to China. The largest group are the "Taiwanese" who migrated to Taiwan from Fukien Province on the Mainland in the 17th to 19th centuries. Another group often counted as Fukien Taiwanese are the Hakka, who came from Kwangtung Province at about the same time but who speak a distinct dialect. The last group is the native people of Taiwan, the aborigines. Their origins are clouded in some obscurity, but it is suggested that they are not of Mainland Chinese ancestry but rather were seafaring people from the Philippines and/or the Malaysian Peninsula. Like the American Indian, these peoples over hundreds of years have had their lands taken from them, have been molested by the Europeans and Orientals who have visited Taiwan, and today are poor and politically powerless. Their cultural artifacts show a proud, artistic, and industrious people who were excellent fighters and fiercely independent. Their lives today, though improving cannot be compared in material, health, or formal terms with the Chinese peoples of the island. (Smith, 1999)

When the Portuguese first came to Taiwan in 1590, Linschotten (a Dutch navigator on a Portuguese ship) was so taken with the loveliness of the island, its lush beauty, flowers, butterflies, and beaches, that he called it "Formosa" or "Beautiful Island." This

name describes well the land we now call Taiwan.

Little is written about Taiwan education in the period before and during the Japanese occupation (pre-1945). Perhaps the best account was presented by George Leslie MacKay, Doctor of Divinity, Princeton University. Dr. Mackay spent much of his life working with the people of Taiwan, and his delightful and scholarly personal account, From Far Formosa, tells about his observations. In this writer's research on education on that island, no book found matches Dr. MacKay's general reminiscences for beauty, clarity, and honesty. His observations of the flora and fauna of the island have never been surpassed.

As part of is study Dr. MacKay mentions only briefly the structure and methodology of pedagogy. The period about which he writes is from the mid-1860's to 1890, the years that he was in Formosa. Though not an academic source per se, MacKay's book does shed a great deal of light on a foreign nation. Education is discussed vividly yet briefly in his study.

MacKay indicates that education in Taiwan was an important part of Chinese culture and had been for at least a thousand years. The competitive examination that all young men could take was the method for academic, social, and economic advancement. These exams were given periodically at the major cities of China (at Taipei and Tainan in Taiwan) and the scores were well publicized through the district, usually by posting them on a wall board (a method still used in Taiwan). Passing these tests gave one the opportunity to seek appointments in government, education, or other governmentally controlled sectors of society. The exams, which culminated with the "great exam" held in Peking, focused primarily on the writings and ideas of the philosophers of Chinese society, particularly Confucius and Mencius; the sessions were grueling and the success ratio among these highly competitive students was quite low. For a more detailed discussion of this topic

please see D. Smith, An Island of Learning (1981). In Taiwan the educational system was a powerful instrument for academic achievement. Few schools existed and tutoring was the main way that a youngster from the provinces could learn the materials necessary to succeed on the national examination. Also, few of the successful scholars who went to Peking to take the exam would, upon passing it, return to Taiwan, a province that was not considered as progressive economically or socially as areas on the Mainland, particularly the region of Shanghai.

The teachers in Taiwan during this period were often men who had been candidates for the higher degrees but had failed and then returned to their home island. These men made up Formosa's intelligentsia and were employed by wealthy families to teach the young boys. Also, a patronage system existed whereby a wealthy family would assist a less fortunate family in sending its bright son to tutoring sessions. This highly informal system - not sanctioned by government or philanthropic agencies - hurt the academic system of Taiwan. Many advantages found on the Mainland were simply not available on the island.

Dr. George L. MacKay describes in some detail the excitement surrounding education circa 1890:

> A Chinese school is the scene of great industry and of great noise. The students all study aloud, and their shrill drawling voices make a disagreeable babel. The text-books are the Chinese classics, and the parents have no cause of complaint on the score of frequent change. The books never change from century to century. The characters are first learned; but it is purely mechanical work, not the slightest attention being paid to the meaning of the words. The book-language is entirely different from the vernacular, and the boy has to commit to memory pages, and even whole books, without understanding anything of their significance. After years of such severe work the boys begin to prepare definitely for the competitive examinations. There is nothing really educative in the system. Unconsciously the style and sentiments of the books are absorbed, but originality, in either thought or expression, is not only undesirable, but utterly impossible. When a young man succeeds in passing the examinations for

> even the lowest degree, preparations on a most elaborate scale are made at his home for honoring him on his return. No one but an eye-witness can imagine the scene. A feast is prepared, theatrical performers are often engaged, a procession goes out to meet the graduate, who affects all the airs imaginable, and his conceit is swollen beyond endurance. His swagger is supercilious to the point of silliness. To recognize his old companions is a condescension for which they feel extremely grateful. The whole performance tends to make these graduates the most obnoxious of all the people one meets.
>
> (MacKay, George Leslie, From Far Formosa, pp. 117-118)

The year 1895 was of great significance in the history of education in Taiwan for in that year, after much bloodshed, the Sino-Japanese War (1894-1895) ended. Japan's success in this event gave her the right to dictate the terms of the treaty of settlement. Referred to as the Treaty of Shimonoseki, Japan for the first time in its history acquired territories that were outside of what most considered her sphere of influence. This was, of course, a precursor to events that were to further germinate in the mid 20th and culminate with World War II. The provisions of this peace treaty provided for numerous concessions on the part of China; most important among these was the ceding of the island of Taiwan (called then Formosa, or "Beautiful Island") to the Empire of Japan. Taiwan would remain a colony of Japan until 1945 when it would again be incorporated into China as one of its provinces. The apocalyptic nature of this event in Japanese-Chinese history is noted by the scholar Yosaburo Takekoshi who, in reference to the annexation of Formosa, stated: "It is a day long to be remembered by us, because on that day the people and the territory belonging to another nation [China] were transferred to our rule, a fact never before met with in all the twenty-five long centuries of our nation's existence . . . ." (Takekoshi, Yosaburo, Japanese Rule in Formosa, p.12)

In conversations with scholars currently living in Taiwan who remember the period of Japan's control, the views expressed are revealing and interesting. Though these

Taiwanese did, and do, consider themselves Chinese, they believed that the fifty years of Japanese administration were, overall, not without some advantage. Early in the period resistance and bloodshed were common as the Taiwanese chose not to cooperate with their new governors. The population was about three million at this time but gradually the two people began to respect each other. Older scholars who today speak of the occupation period remember it in two phases: (1) The era of repression which lasted until the mid-1920's, and (2) the era of cooperation when the Japanese and the Taiwanese began to work together to develop their homeland.

One field that the scholars with whom I spoke were quite positive about was the Japanese education policy. This no doubt reflects a bias-the professionals who felt that positive accomplishments in education were made in this age were men and women who themselves had received their primary and secondary education in Japanese-administered schools. It is quite impossible to judge the quality of the educational experience in these schools, yet the scholars who attended them and who today are part of the educational structure in Taiwan remember this period in a not unfriendly way.

One of the earliest Taiwanese educational leaders in the Japanese period was Lin Hsien-tang who had been a student of Liang Chi-Chao, a respected and well known Chinese scholar. Liang argued that the Taiwanese should attempt to work with the more progressive members of the Japanese group in Taiwan and that through cooperative efforts the Japanese and Chinese could live in peace and all mutually benefit. Lin Hsien-tang was to be in the vanguard of this movement, particularly as it was relevant to educational development - and area to which he was to give his greatest counsel.

Education in Taiwan was quite disorganized. The Chinese, with their thousands of years of academic and scholarly excellence, had during the late Ching dynasty become

corrupted. Military humiliation, territorial loss, and the evident decline of the Manchu dynasty all led to a decline in national spirit that is still seen in the opulent, garish art of these last years of the Ching. Taiwan education (the island being some 250 miles from the Mainland) was in a shambles and few plans for its improvement had been devised by the central government of the Chinese Mainland. The Japanese, on the other hand, had been successful in modernizing their educational system and were willing to share with their new hosts the success of their experience. (In 1872 Japan had started mandatory elementary school education for all.)

The Japanese began their education policy with a paradox: Was the educational system to teach the Taiwanese advanced scientific education which would allow them to be successful in career endeavors and consequently prosperous, or should the thrust be in the direction of assimilation? That is, should the Japanese-administered school emphasize Japanese language and culture over academic and skill courses that could lead to personal self-betterment of students? Initially the assimilation concept was allowed to prevail. The Japanese, it seems, hoped to make Taiwan an integral part of the Empire and perhaps, in time, allow it to govern itself as an autonomous Japanese province.

In a few years the assimilation concept was replaced with more practical educational objectives. Chinese students were then allowed to pursue their formal study beyond the traditional elementary phase. This was a major alteration in the Japanese colonial education policy and recognized the concept of education as an end rather than purely a means towards political and cultural assimilation.

In this context Yosaburo Takekoshi in his important 1907 study (Japanese rule in Formosa) stated: "Our educational authorities were confronted with a difficulty which they did not know how to avoid. Should they give the people a practical scientific education and

thus enable them to better themselves, have more comfortable homes, and make more money; or should they give such an education as would assimilate them with us Japanese?"

A dual system of education was eventually established in Taiwan during the era of Japanese administration. Communities continued to provide basic educational skills in which Chinese-Taiwanese traditional education was emphasized; however, these were inferior to the other system which was for the Japanese and their families. Modeled in subject and methodology on the Japanese compulsory education system established in Japan in the early 1870's, these schools were located mainly in the areas most closely associated with the colonial administrative system - the large cities and seaport communities. Though not forbidden to attend these schools, the Taiwanese were not accepted for admission in large numbers. Consequently, during the period of Japanese rule, the Taiwanese generally could not go beyond the primary school level; the few who did gain admission were able to advance through the middle and high school grades and in some few cases matriculate to overseas colleges and universities. The main place where young men could go for their education was Japan; some few came to the United States and a very small number went to Europe.

It was not until the late 1930's that Japan expanded educational opportunities in Taiwan. W. G. Goddard in his book, Formosa: A Study in Chinese History, paints a gloomy picture of educational opportunities under the "Japanese Occupation." Though only about 50 percent of the Taiwanese were afforded a basic education during this period, this is probably not terribly different than educational opportunities available on the Chinese Mainland. H. A. Franck who visited Taiwan in 1925 makes this statement which perhaps best sums up the educational policy in the period of Japanese administration:

> Primary school for the Japanese and the Formosans are separate, but the Formosan children must learn Japanese, since teachers are forbidden to teach in the Formosan language. No Formosan children can go to a government school unless he can speak Japanese and, according to a new ruling, no more private schools can be opened. There are still a few tutor schools, but even in these, Japanese must be taught.
>
> (W. G. Goddard, Formosa: A Study in Chinese History, p. 163)

During the early 1920's scholars like Lin Hsien-tang were able to bring about some education reform and a very few middle and high schools were set up in Taiwan for Chinese. Japanese language studies, however, were an important part of these institutions. Few commercial schools existed in Taiwan at this time and only a very small percentage of the population could follow this path for educational enrichment.

Interestingly, the very best university in Taiwan today has its roots in the era of Japanese occupation. National Taiwan University was establish in Taipei (Taihoku was the Japanese name given to this main city on the island). The institution existed mainly to allow the Japanese a place to send their children for advanced study. Few Chinese were admitted and the ones who did attend National Taiwan University were allowed to earn degrees in only one field - medicine. Today a disproportionate number of physicians in Taiwan are of pre-1940 Chinese ancestry. The medical field is virtually dominated by the Taiwanese who found ~~as~~ their vehicle for academic and financial success medical science. Those Taiwanese who went to school at the Japanese universities majored in law or medicine, two skills that could be used most fully upon their return to their native island.

On reading of the policies of the Japanese administrators in Taiwan and also after discussing educational policy with Chinese scholars who in the late 1930's were educated in primary schools, one senses that had the tension of World War II not been mounting, Japan's policies would have been liberalized in the field of pedagogy. External forces - the

Sino-Japanese conflict that began in 1931, the rift with the U.S. and other Pacific powers, and the movement of Japan from its constitutional and quasi-representative government into a more authoritarian and promilitaristic posture - destroyed the hope of the few Taiwan intellectuals like Lin Hsien-tang who were somewhat optimistic about the future relations of the two supreme Oriental peoples.

Some scholars educated in the period of Japanese control do not now generally remember the era a one of oppression or disdain. They feel that the Japanese were generally fair rulers within the harsh reality of the colonial concept of occupation and that opportunities for educational advancement that were not available early in the occupation were beginning to develop in the 1920's and 1930's. Whether these men and women who were interviewed represent a general and accurate portrayal of the 1930's and the Japanese schools is difficult to evaluate. Yet this writer suspects that the school policy towards Taiwan in this era would have been improved and an expansion of educational opportunity - a *cause celebre* in Japan at that time - would have spread had World War II been avoided.

Chinese colleagues have suggested that this interpretation represents a minority view for as long as Japan remained in Taiwan as a colonial force conditions for the indigenous populations would have remained precarious. History does suggest that colonialism is self-destructive and the self-determinations of a people will eventually destroy even the more enlightened colonial occupier.

In his classic study The Colonizer and the Colonized, Albert Memmi states ". . . the colonized can wait a long time to live. But, regardless of how soon or how violently the colonized rejects his situation, he will one day begin to overthrow his unlivable existence with the whole force of his oppressed personality. He attempts to reconquer all the

dimensions which the colonization tore away from him."

E. RECONSTRUCTING EDUCATION THROUGH REFORM

The Japanese defeat in World War II led to the retrocession of Taiwan to the Chinese government and thus to the reorganization of the educational system and education policy on the island. With the fall of the Chinese Nationalist government in 1949 the leaders of non-Communist China were forced to move to Taiwan and there radically altered the course of Taiwan development. Virtually every phase of life in Taiwan was affected by the influx of some three million "Mainland Chinese" who soon established themselves in political leadership and set about revamping and modernizing the island. This period was one of conflict; the ordeal of change created tensions on island China as did events in the Pacific area.

Education in Taiwan in the post-1949 period has made substantial gains. Even those people who are critical of the "Mainland" influence on the island agree that educational opportunity and quality are excellent. The only Asian society that can compete with Taiwan in educational vividity is Japan; yet the Japanese system with its "examination hell" and obsessive pressure on children to enter the right kindergarten and then the correct public school has created numerous psychological and societal problems that are perhaps neutralizing the high quality of learning and teaching. An excellent discussion of this is found in William H. Forbis' book, Japan Today (1975).

Competition, examination, and conformity are also found in the educational system of Taiwan; they have, however, been minimized by two forces. The Chinese

are more reflective and philosophical about success and failure than the Japanese, and education in Taiwan is a meld of the traditional draconian examination system and the more pragmatic, egalitarian, and liberal-progressive ideas of American pedagogical philosophy and psychology. This synthesis has created a system of which the people of Formosa are proud and supportive. Portions of this chapter appeared in my monograph The Confucius-Dewey Synthesis (1994).

It has been suggested by David E. Apter in his important book, The Politics of Modernization (pp.145-148), that in a developing society education plays a number of very important roles. It helps promote high literacy which in turn assists a society's technical and economic development, but perhaps more importantly it enhances the socialization and integration process by creating a common background and identity among the peoples and allowing them to join with the governing groups in a cooperative effort toward societal modernization. David Lerner in The Passing of Traditional Society (p. 46), suggests that as a society like Taiwan becomes industrialized, a natural phenomenon of expanded educational opportunity occurs. "Increasing urbanization has tended to raise literacy; raising literacy has tended to increase media exposure; increasing media exposure has [enhanced] wider economic participation (per capita income) and political participation (voting)."

Education is of such importance to Chinese society and the political leadership of Taiwan that, unlike in the United States, the issue is addressed specifically in the Constitution. Expenditures, educational goals, and specific comments on the fiscal base of operation for all aspects of Taiwan education are detailed in Chapter 13, Section 5 of the National Constitution (which became effective on Dec. 25, 1947). The provisions relevant to education state:

Article 158: The nation's educational and cultural services shall have as their aim the development among the citizens of national characteristics, democratic spirit, traditional morality, good physique, scientific knowledge, and the ability to earn a living.

Article 159: All citizens shall have an equal opportunity to receive education.

Article 160: All children of school age, to wit, those from six to twelve years, shall receive free primary education. Those from poor families shall be supplied with textbooks at the expense of the Government. All citizens above school age who have not received primary education shall receive supplementary education free of charge and shall likewise be supplied with textbooks at the expense of the government.

Article 161: The National, provincial, and local governments shall create scholarships to assist students of good scholastic standing and of exemplary conduct who lack the means to continue their school education.

Article 162: All public and private educational and cultural institutions throughout the country shall, in accordance with the law, be subjected to State supervision.

Article 163: The State shall pay due attention to the balanced development of education in different regions and shall promote social education in order to raise the cultural standard of the citizens in general. The National Treasury shall give cash grants to border regions and economically poor areas to help them meet their educational and cultural expenses. The Central government may itself undertake the more important educational and cultural enterprises in such regions or give them financial assistance.

Article 164: Expenditures for educational programs, scientific studies and cultural services shall be in respect of the Central Government, not less that 15 percent of the total national budget; and in respect of the provinces, not less than 25 percent of the total provincial budget, and in respect of the municipalities or hsien, not less that 35 per cent of the total municipal or hsien budget. Educational and cultural foundations established in accordance with the law shall, together with their property, be protected.

Article 165: The State shall safeguard the livelihood of those who work in the field of education, sciences, and arts and shall, in accordance with the development of the national economy, increase their remuneration from time to time.

Article 166: The State shall encourage scientific discoveries and inventions and shall protect monuments and articles of historical, cultural or artistic value.

Article 167: The State shall give encouragement or subsidies to the following enterprises or individuals:

(1) Private educational enterprises in the country which have a good record;
(2) Chinese educational enterprises abroad which have a good record;
(3) Persons who have made discoveries or inventions in the fields of learning and technology;
(4) Persons who have rendered long and meritorious service to the cause of education.

The Constitution has worked as a guide for educational development; however, due to political circumstances, the national government which is called upon to give 15 percent of the national budget has been unable to meet this provision.

There are many subjective methods of measuring the quality of educational experience. The schools in Taiwan are in excellent condition, discipline problems are

virtually nonexistent, daily attendance is much higher than in the United States, and parents play a great part in the education of their children. While we were in Formosa we visited a number of urban and rural schools. The grounds were well kept and graffiti was nonexistent. Children study aloud and the respect afforded teachers is immediately evident. Parents are asked to review their children's completed homework assignment each night and then to sign a homework record sheet indicating that the work is done and is of acceptable quality. Events at schools, such as music recitals, art shows, sports activities, and science displays, are attended very well by parents and grandparents (many of whom live with the family). Perhaps the best subjective factor is the way the children look on the way to and from school. They are generally walking fast or hurrying to the public bus (a common and cheap means of travel to school) and they inevitably carry with them a satchel filled with books, papers, and other materials. Some children are not much bigger than their homework satchels! Smiles are the most common expression seen on the faces of students. When one compares the attitude of most public school students in the United States with the feeling that pours out of the students in Taiwan, it is evident that most of these youngsters like school and are able to internalize the relationship between education, family honor, and future social, academic, and employment success. One also notes in Taiwan that misbehavior, though present, is not dealt with as severely as in the U.S. schools. Parents are called upon to solve the problem. The school teachers and administrators do not see their role as one to enforce discipline. The parents seem to handle these problems in a variety of ways; the end result is that the difficulties that plague U.S. schools do not exist in Taiwan. They are simply not part of the culture or social setting and discipline problems, disrespect, and disruptive and uncontrolled behavior on the part of students is unacceptable. Incidentally, every school visited had a statue or

large painting of Confucius at its entrance. The moral and ethical implications of this symbol represent well the general tone of the academic atmosphere that is developed. Respect, kindness, and cooperation are found in the public and private schools; discrimination, social promotions, mainstreaming, truancy, poorly groomed teachers, and administrative rancor are enigmas to Chinese education in Taiwan. When the issue of discipline is brought up, teachers and administrators indicate it is never a problem. In the U.S. this area - classroom management - rates highest on the list of ills (1975-1995) as perceived and articulated by American pedagogues. Recent events of gun related violence in American schools forebodes poorly of the future of the U.S. education system.

Objective criteria applied to education in Taiwan also show the system to have been successful. One of the major determinants of educational vividity is enrollment trends which indicated larger numbers of youngsters are spending more years in school.

The Constitution clearly defines educational opportunity in grades 1-6, which are mandatory, and grades 7-9, which are completely free and compulsory at this time. A major change came to the structural designs of Taiwan education in 1968-69. At that time the public junior high school (also called at times the national high school) was established. This gave children the opportunity to continue their education *sans* an entrance examination through grade 9. Before this, admission to the junior high school was predicated on the score of a national exam given to sixth graders. It must be added that this extension was not without major economic and facility allocation difficulties.

When one talks of secondary schools in Taiwan a unique frame of reference must be employed. There are four types of secondary institutions: the academic high school, the commercial three-year school, the three year vocational school/high school and the five year junior college. The traditional academic high school consist of three years of

intensive academic course work. Its intent is to prepare the able student for two objectives; (1) To pass the national joint entrance examination for college and university admission; and (2) to give the student an adequate academic base from which to build his college education or his career. The other school models mentioned are to educate younger and older students for employment opportunities in Taiwan's expanding commercial and technological post-industrial economy.

F. ECONOMICS AND EDUCATION: A SYNTHESIS

One could suggest that a model might be drawn which shows a near direct and perfect correlation between educational expansion and rapid economic growth. It is impossible to discern which begat the other. However, it is not coincidental, I believe, that the two -- economic and commercial advancement and expanding educational opportunity and quality -- went hand in hand.

An excellent article appearing in the August 1993 journal Comparative Education Review gives insight into the theoretical framework that has brought about educational and economic development in Taiwan. Professors Chien Liu and Michael Armer suggest that there are three main perspectives that look at the relationship between education and economics. The first is referred to as the "human capital theory;" the second, as "status competition;" and the third, "class reproduction." In order to put the topic of the Taiwan junior college into perspective, I will review briefly each of these theoretical models and show how they interact with Taiwan's educational and economic systems.

The human capital theory suggests that people with greater educational opportunity and years of schooling have greater earning power, find better jobs, and have a greater

satisfaction with their lives and their employment than individuals who are less educated and have attended school fewer years. This model holds that there is a direct relationship between a nation's economic advancement and the vitality of the educative process in that society.

Status competition theory views the schooling of people as an ingredient closely related to a fairer distribution of influence and a greater support of, and satisfaction with, the society in which they live. The status competition theory does not necessarily suggest that economic growth will be a concomitant partner.

Class reproduction theory takes a more Marxist view of education and suggests that schooling brings about many qualities. Elites will go to academic high schools and major universities where they will study science, classics, art, literature, ad infinitum, which will separate them from the majority of the citizens in the society. In this model, schooling does not necessarily lead to improved economics; it may lead to a high level of dissatisfaction by the lower classes who were not able to attend the better institutions for their tertiary years of schooling. Taiwan has attempted and, I believe, has succeeded in accomplishing the first two theoretical models that I have identified.

Respect by the less educated is prevalent in Chinese society and has been for thousands of years. Perhaps the reason that the less educated majority does not feel threatened by those who have advanced education is that in Taiwan an objective, fair, and equitable examination system prefigures and presupposes who may move up the educational paragon and reap the benefits of advanced schooling. At the same time, those who are not in that small, elite group attending the best universities have numerous other outlets for their intellectual needs. It is the premise of this essay that a major stabilizing factor in Taiwan society is the junior college, which affords those energetic students who

do not qualify for university educations to attend institutions of learning that train them in both academically and commercially oriented fields of study. Virtually all who graduate from a junior college in Taiwan find gainful employment in the expanding economic system. At the same time, they become consumers with greater purchasing power than those who have not attended higher education. This, then, leads to a perpetuation of the dynamism of the society. At the same time, it lessens the gap between the elite who, through examinations, qualify for the best universities and the second-tier students who cannot be accepted at a university, but who have the status and the learning opportunities given them by being commercial high school students.

Economic development is vital to a modern society and depends on natural resources, capital, manpower, and technology.[1] Since Taiwan is densely populated, small in area, and lacking in capital and resources with low-level technology, its economic development is based solely on rich manpower.

Abundant manpower without excellent commercial and technical training offers little help to economic development; on the contrary, it may be a hindrance to the development. During the past three decades, the economy in Taiwan has been not only a success that is praised by the rest of the world, but also a model that can be followed by other developing countries. The main reason is that Taiwan has had abundant commercially trained manpower as a result of the commercial education system of the nation. Thus, this great economic achievement comes indirectly from successful commercial-vocational-technical education and training.

Although commercial-vocational-technical education contributed a great deal to

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[1]For a more detailed analysis of economic growth and development in Taiwan, 1950-1995 please see Smith, The Confucian Continuum (1991), particularly chapter 5.

economic development in the past, in terms of rapid changes in modern society and scientific development, how commercial education can continue to make greater contributions to the economic growth of Taiwan has become a major concern for the nation.

Since the recovery of Taiwan in 1945, economic development in Taiwan was beset with countless difficulties. Fortunately, under the current governmental leadership, this development has been successful, but by no means easy. Economic development from 1945 to the present in Taiwan may be generally divided into four phases.

In 1945 Taiwan was recovered with a productivity much weaker than that before World War II because the original industrial construction was either destroyed during the war or damaged, both intentionally and unintentionally, by the Japanese armed forces upon surrender. Unfortunately, at the same time the Communist rebellion on the China mainland led to a deficiency of manpower, materials, and finances; the government was incapable of taking care of the rehabilitation of industry in Taiwan where materials were scarce, commodity prices were high, and there was no confidence in the currency; a large number of the people had moved to Taiwan from the mainland, and the problem of unemployment was also extremely serious.

In order to stabilize commodity prices after the government moved to Taiwan, monetary system reform was conducted on June 15, 1949 and various actions were taken to restore the people's confidence in the monetary value and to inhibit the rapid increase of demands for goods. The maintenance and repair of original agricultural and industrial construction and of communication and transportation facilities were begun. As a result of implementing land reform and expanding the textile, fertilizer, and power plants so as to enhance agricultural and industrial production, commodity prices were generally

products processing. Agricultural products were exported in order to earn foreign exchange, and Taiwan began importing the machines, equipment, and raw materials required for industrial development. In field of industry, labor-intensive industries (e.g., textiles, plywood, and home electrical appliances) were chosen as the main thrust. They required simpler techniques and less capital, but more labor in order to increase Taiwan's substitutes for imports (Office of Economic Studies, 1997). Owing to the correct policy and successful execution in this phase, agricultural and industrial yields escalated greatly: The annual average increases were 4.5 percent and 11.7 percent, respectively, and the annual average economic growth rate was 7.6 percent.

From 1953 to 1960 economic development in Taiwan emphasized agricultural products processing; light industry and development orientation was aimed at enriching the market at home. However, after carrying out two four-year economic plans, the domestic market for produced consumables was gradually saturated. In order to promote sustained economic development, create employment opportunity, settle unemployment problems, and raise incomes, an exchange was needed for better capital, equipment, and raw materials. Therefore, in the period from 1960 to 1972, which spanned the third, fourth, and fifth four-year economic plans, economic development in Taiwan was expansively export oriented. Due to the rapid increase of export trade, industrial production was reoriented from the domestic market to the international market. This, then, is the third phase of economic development in Taiwan the export expansion phase.

Since the foundation of agricultural and industrial production was established in the 1950's, the government conducted a series of foreign exchange, trade, financial, and economic reforms; it accelerated economic development plans and promulgated the Rules for Encouragement of Investment to encourage savings, investment, and export, and it

stabilized in 1952 (Office of Economic Studies, 1997).

From 1945 to 1952 the governmental strategy of economic development was to stabilize currency and commodity prices and to recondition the production and communication facilities damaged during the War of Resistance against Japan is order to restore their productivity to the pre-World War II level. Therefore, this first phase of Taiwan's industrial development may be called the rehabilitation phase.

Rehabilitation activities were generally finished by 1952. In order to effectively use the limited resources, the government carried out a series of four year economic reconstruction plans to proceed with the planned economic reconstruction since 1953. This was the turning point of economic development in Taiwan which laid the foundation for rapid economic development therein.

The second phase of economic development in Taiwan, the so-called import substitution phase, spanned the first and second four-year economic plans from 1953 to 1960. Economic development in this phase was aimed at supplying the industrial products required by the people at home, thus replacing the imported foreign goods on which the people previously relied.

As a result of the government's monetary system reform and reconstruction since the recovery of Taiwan in 1945, commodity prices were gradually stabilized, and agricultural and industrial production was restored to prewar levels. In order to effectively employ the limited resources, the government began conducting the first four-year economic reconstruction plan in 1953. Under the strategy of "cultivating industry with agriculture and developing agriculture with industry," the implementation of "land-to-the-tiller" was completed. Agricultural production techniques escalated, agricultural production increased, food supplies were enriched, and raw materials were provided for agricultural

promoted the production-scale expansion of enterprises, thus realizing the advantages of economy of scale in the late 1950's. Agricultural and industrial yields were rapidly increased. In addition, although American aid was terminated in July 1965, Taiwan experienced no economic recession because the international economy was stable, the important agricultural and industrial materials, were available in adequate quantities and at cheap prices, labor productivity was sufficient, and national savings increased greatly in Taiwan in the 1960's. Rather, Taiwan's annual economic growth averaged 10.2 percent. Taiwan achieved its dual objectives of economic development and stability simultaneously, so it was internationally praised as the "miracle of economic development."

In 1973 Taiwan's economy still maintained a very high growth rate of 12.8 percent. However, after the first energy crisis in October 1973, oil prices increased, the world financial market was in chaos day after day, and commodity prices also increased. In order to deal with the commodity price expansion, various countries took deflationary actions, and protectionism gradually increased.

As a result of energy price increases, commodity price and wages were increasing in Taiwan day after day. Since most exports were labor-intensive industrial products and rising wages far exceeded increases in labor productivity, the competitive ability of Taiwan's products was lost or weakened. In addition, various limitations in the foreign market foreclosed further large export increases from Taiwan in the 1960's.

In order to deal with rapidly rising commodity prices and wages at home, and with the international economic recession and its impact on exports from Taiwan, the government adopted the strategy of "striving for growth in the course of stability" to stabilize commodity prices at home. In order to expand the foundation for future development, numerous large scale construction projects were begun (airports, harbors, rail and

roadways).

In the past 50 years and more, the economic development in Taiwan was beset with countless difficulties and frustrations: the present achievement really is a miracle of economic development. From the time the first four-year economic reconstruction plan was begun in 1953 until 1986, the annual recorded economic growth rate averaged 8.7 percent. This was much higher than the 3.8 percent in the developed and industrialized countries and the 4.8 percent in the other developing countries. From the viewpoint of gross national product, the economic development in Taiwan is also extremely surprising: The annual average GNP increased by 7.5 percent in 1950's, 10.2 percent in 1960's, and 8.3 percent in 1970's under the effect of two energy crises and worldwide economic recession. From the viewpoint of GNP per capita, less than US$100 in 1952 was increased to US$5,000 in 1987 and in 1997 US $12,000. Such a rapid increase is extremely rare in the world. (A slight decrease in the per capita GNP of Taiwan occurred in 1998-2000 due to the economic problems that have befallen all East Asian societies).

Since Taiwan's resources are deficient and its domestic market small, its economic development must rely considerably on export. In the 1950's, economic development was aimed at substituting for import. The increment rates of import and export were not high: 6.0 percent and 4.4 percent respectively. In the age of export expansion in the 1960's, the annual average increment rate was 27.4 percent for export and 19.5 percent for import. Under the effect of world economic recession in the 1970's, the export increment rate was 21.4 percent, which was lower than before, but the import increment rate was 20.0 percent which was a little higher than that in the 1960's.

One of the economic development strategies in Taiwan is "striving for development in the course of stability and striving for stability in the course of development." So in the

process of pursuing economic growth, the government had never overlooked the importance of stability, and Taiwan became one of a few countries capable of achieving rapid economic growth and commodity price stability simultaneously. Consumer prices in Taiwan had an average increment rate of less than 10 percent in the 1950's, but increased only an average of 3.3 percent annually in the 1960's; not only were these inflationary increases lower than those in the other developing countries, but also prices were more stable than those in developed countries. However, because of the energy crisis in 1973-74, the average consumer price increased by 27.8 percent, which was an all-time high in twenty years. Since the government began large scale construction projects and took various actions to stabilize the economy in 1974, commodity prices were gradually stabilized, and the economy could still maintain lower growth. When Taiwan was gradually recovering from the first energy crisis, the second energy crisis occurred to frustrate its economic growth and to cause its commodity prices to fluctuate. The average economic growth rate was only 7.4 percent in 1979 and 1980, but the price increase rate was 14.4 percent in these two years dropping 7.6 percent in 1981.

As noted above, another strategy for successful economic development in Taiwan is "cultivating industry with agriculture and developing agriculture with industry." Agriculture was still the economic gravity of Taiwan in the early period of its economic development. For example, in 1951 agricultural production was 35.9 percent of the gross national product, while industrial production was only 18 percent, or half of agricultural production. Of the 18 percent, three-fourths was light industrial production and only one-fourth was heavy industrial production. In 1963 the proportion of industrial production (28 percent) exceeded that of agricultural production (27 percent) for the first time, and the industrial proportion has been constantly rising since that time. In 1972 agricultural production was

mineral products are very scarce and insufficient to meet domestic needs. Almost all the vital industrial raw materials are imported. As for agricultural production, and with the exception of rice, various grains and a few agricultural products need to be imported in quantities every year.

Given this scarcity of resources, how could Taiwan achieve such an economic miracle? In addition to the leadership of government, the sufficient labor force is a vital reason for the rapid economic development. In the 1950's industrial development in Taiwan was in its initial phase and was unable to absorb the labor force. Instead, agriculture absorbed a great deal of manpower through the labor-intensive pattern of refined farming because of successful land reform and a greater willingness to increase agricultural yields. In the 1960's the government weighed production conditions in Taiwan and chose labor-intensive industry as the basis for development since it required fewer techniques and less capital, but additional labor force. Taiwan's sufficient "cheap," but superior, labor force enabled it to compete in the international market. Its rapid export expansion eventually created fruitful economic development.

Sufficient manpower is certainly prerequisite for economic development, but in an industrial society the quality of that manpower is also a factor that cannot be neglected. In the 1960's Taiwan fully employed its sufficient labor force and cheap wages to develop labor-intensive industry and pioneer external trade. After 1968 its rapid increase of export burdened the labor supply, gradually transforming surplus into scarcity; wages gradually increased and Taiwan's products became less competitive in the international market. Since 1974, in view of two energy crises, worldwide economic depression, prevailing international protectionism, and rivalry with other developing countries, the government has been actively promoting technology-intensive industry and has been engaged in making

only 14.1 percent of the gross national product and was further lowered to less than 10 percent in 1981. Meanwhile, industrial production was 40 percent of the gross national product in Taiwan in 1972 and escalated to 44.5 percent in 1981. In the same period, heavy industrial production increased from 43.9 percent to 57.6 percent of the gross industrial production. The economic pattern in Taiwan was transformed from one emphasizing agriculture to one emphasizing both light and heavy industries.

A number of factors affect the success or failure of economic development in a country. Having an island-type economic pattern. Taiwan is highly dependent on external resources, so its economic development is affected by both internal and external factors to a far-reaching extent. For example, in the 1960's world economic prosperity, ample agricultural and industrial materials, and stable commodity prices did help the sustained economic growth in Taiwan where exports grew with the quickest speed. In the 1970's Taiwan's economy was subjected to a heavy blow as a result of two energy crises, the disordered international financial market, worldwide commodity price inflation, and protective actions taken by various countries to impose limitations on foreign products.

External factors have a far-reaching effect on the economic development in Taiwan, but internal factors, such as the so-called "self-help capable of inviting help from others," play a vital role in promoting economic development in Taiwan. These factors may be generalized into the following points.

The government has conducted a series of economic reconstruction plans since 1953. Based on different subjective and objective conditions, governmental leaders reviewed the correct development strategies which were the important reasons for promoting economic development in Taiwan.

Three-fourths of the land in Taiwan is mountainous, but the forest resources and

education and training widespread and advance so as to supply the type of manpower required by the development of technology-intensive industry. A post-industrial economy is now emerging in Taiwan.

According to the evaluation of the Economic Planning Council and the Executive Yuan, the contribution of technology advancement to economic growth in Taiwan far exceeds the commitment of capital and labor. The factors of technology advancement normally include improved labor quality, administrative techniques, and basic skills that are closely related to education (Economic Planning Council, 1997). It is obvious that widespread and advanced education and training are also vital factors in promoting economic development in Taiwan. (Smith, The Confucian Continuum, 1991)

Chapter 2

The Commercial High School In Taiwan: An Interpretation

The Taiwan commercial high school provides thousands of men and women the

credentialing and the skills to anticipate high income, middle class status and prestige, and successful life-long employment in the dynamic commercial sectors of that society.

The Taiwan commercial high school dates from the early days of the Japanese occupation of this island. Several sociological and economic forces contributed to its genesis. The most important were the need for workers to learn to operate the island's bureaucracy and business enterprises a desire by the Japanese authorities to inculcate in the Chinese youth of Taiwan ideals and values compatible with the policies of Tokyo, and, perhaps most importantly, an eagerness on the part of Chinese parents in Taiwan to see their children follow the Confucian tradition of academic achievement and social and cultural prestige. Chinese society has always sanctioned education as the most important vehicle for upward mobility, and this remains true in Taiwan today.

The modern-day commercial high school in Taiwan came into being after the restoration of the island of Formosa to China in 1945. However, from 1945 to 1950 the island's political and economic lives were dominated by turmoil and tension. It was not until the 1950's and '60's that education became well organized, effectively governed, and adequately financed.

In Taiwan today there are 106 commercial high schools located throughout the island (as define for this paper and also by the Ministry of Education, 1999). These schools serve, at this time, a total of 197,000 students. In 1998, approximately 62,000 (51,000 females/11,000 males) graduated with diplomas from the commercial high school system. Most attended day school: some went through the evening programs that are similar to the regular day school model. Employed by the commercial high school there are some 8,000 teachers. Taiwan, of all societies, has one of the largest percentages of its population attending school. Currently, there are approximately 23,000,000 living in

Taiwan; 5,230,000 of these people are students in the Chinese educational system on that island. (Educational Statistics. Ministry of Education, 1998)

For the purposes of this essay, I am defining the one hundred and six (106) commercial high schools in Taiwan as follows:

> A three year institution that is entered after the student has successfully passed the vocational, technical, or commercial school admission examination. The commercial high schools, (unlike the technical/vocational schools) focus on areas of study that are both academic and relevant to the world of office work, language, computers, accountance, international business, translation, hotel management, health care assistance, tour guide leadership and other commercially important areas. Most students graduating from the commercial high school find immediate employment (85%): some continue at a junior or four year college, (5%). Education Statistics.(Ministry of Education, 1998)

Commercial high schools in Taiwan may be set up and run by the government or by private investors under the direction of a board of trustees. Admission to the commercial high school requires an applicant to pass a rigorous examination after the ninth grade, that is similar to the admission test to the academic highschool but less oriented to pre-college course work.

At the completion of the three-year program, the student receives a diploma awarded by the commercial high school. At that time, he may seek three alternatives in his academic career: The first would be to enter the world of business and commerce, and be given on-the-job training that would help make his education relevant to his career. The

second would be for the youngster to seek admission into a four-year baccalaureate-level technical institution. Should he do this, he would be admitted at the freshman level and be required to take four years of education. At the completion of those four years, he would receive the bachelor of science degree. A rigorous examination is given for those students who wish to matriculate into a technical institute. The third option is for the student to seek admission to a traditional two year junior college. To do this, he must first complete his three years of commercial high school. He then must sit for the National Junior College Entrance Examination. If he is successful, he will then be admitted as a freshman to the two year junior college.

Both the technical institutes, which offer the baccalaureate program, and the traditional university, which also offers the baccalaureate program for the commercial high school pupil, also have evening programs that parallel closely the daytime programs. Therefore, in theory, an energetic man or woman can work during the day and complete the baccalaureate requirements through evening study. This program requires students to go to school six days a week and extends by one year the amount of time required at the institute or the university to complete the requirements for a bachelor's degree. Few commercial high school students (5%) follow this route.

Educators in Taiwan frequently express disillusionment with the schools and do question the teaching methodology and the emphasis on examinations for success. However, all Chinese educators in Formosa with whom I have spoken agree that the difficulties that are pervasive in this and all education systems throughout the world do not outweigh the inherent benefits of schooling. Taiwan, Korea, Singapore, and the eastern regions of mainland China see education of the young as an essential ingredient in the development of character, morality, understanding of society, and a work force.

Students admitted to the commercial high school in Taiwan after the ninth grade are not in remedial programs. The admission examination assures that the cohort group entering the first year of the commercial high school has been adequately prepared to do the type of scholastic and commercial scholarship that the school requires. To put this concept succinctly, the commercial high school is not a dumping ground for academically inferior young people. In the United States, our vocational/technical high schools and, to a lesser degree, our community colleges are seen by many as being significantly inferior to the academic or comprehensive high school and the liberal arts college and university. This variance in status is not held as strongly in the Taiwan educative experience.

The average beginning age of commercial high school students in Taiwan is 16. Should their educational progress proceed as anticipated, it is expected that they would complete their diploma by age 19 or 20. This is slightly older than what might be expected. The reason is that children in Taiwan begin first grade at six-and-a-half to seven years of age and hence have an extra chronological year added to their education.

A key aspect of the success of the commercial high school model in Taiwan is accessibility. Commercial high schools are found in many of the smaller cities throughout the island. The larger urban areas, such as Taipei, Kaoshiung, Taichung, Tainan, Keelung, and Hualin have at least one major commercial high school. Many of these commercial high schools are public, that is their funding is from either the city or county government. An expanding number of private commercial high schools have also emerged since the 1960's. They are now in the majority. All commercial high school activities, including curriculum, admission standards, the hiring of faculty, the placement of administrators, attendance practices, and the physical structure of the institution, be they public or private, are overseen by the Ministry of Education and also by the Department

of Vocational Education. Two nationally funded elite commercial/technical high schools exists in Taiwan and carry great prestige.

Taiwan is made up linguistically of three distinct groups of people: the Taiwanese, mainland Chinese, and aborigines. The Taiwanese can be defined as those persons who migrated from mainland China from the 14th until the 19th century. For the purpose of this study, we can define mainland Chinese as the group who came to Taiwan in the 20th century, particularly those who chose to leave the mainland between 1945 and 1950 when China was plagued by revolution and was placed under Communist control. The smallest group is made up of aborigines. Eight tribes of Polynesian peoples migrated from the Malaysian/Philippines area approximately 10,000 years ago. They are distinct from the Chinese and the Taiwanese in that their language and their customs, as well as their physiology, suggest that they are of a different ancestry.

Taiwan consists of approximately 23 million individuals, 19 million of whom can be defined as Taiwanese, 3.5 million who have their roots in mainland China, and the remaining are of aboriginal ancestry. This demographic profile is also found in the commercial high school system of Taiwan with one conspicuous exception: Aboriginal peoples are significantly fewer in number at all education levels than the real population numbers of the eight tribes would suggest.

A very positive feature of the commercial high school system in modern-day Taiwan is the low attrition rate. Approximately 12 percent of the boys and girls being admitted to the commercial high school find it impossible to complete their studies. The main reasons given are family and financial difficulties, health and adjustment problems, and opportunities in the work place that are too tempting to forgo. Statistical data on the exact reason why individuals drop out of high school are difficult to come by; however, the

dropout rate is not of concern to the educational leadership of Taiwan. They believe strongly that only a student having profound difficulties would ever choose to leave the academic and training atmosphere of an educational institution. Few of the students completing the three-year commercial high school matriculate into the university and college system of Taiwan.

Overwhelmingly, employment is designated as the goal of those students interviewed. When I asked thirty commercial high school students why they chose to attend their institution, 90 percent indicated that they wanted to be able to find good jobs and make decent livings for themselves and their families. The second most important reason was that they wanted to please their parents by continuing their education. The third most important reason given was that they could not be accepted at an academic high school and, therefore, the commercial high school was most appealing to them. The fourth reason given was that they wanted to continue social, sporting and athletic life, and friendship models that they had made while attending grades one through nine. Lastly, a few students indicated that they did intend to use the commercial high school for a launching pad for matriculation into a more traditional college or technical university.

In interviewing university and college students at various institutions in Taiwan, I was surprised at how few had come from commercial high schools. It is a very arduous task to matriculate from the commercial high school into the baccalaureate degree school.

The reason given by officials at the Ministry of Education as to why so few students do not matriculate is as follows: "The preparation given to students at the contemporary commercial high school does not prepare them to succeed on the highly competitive Joint College Entrance Examination." The second reason expressed was that most commercial

high school students have reached their level of expectation at the end of the third year and are, therefore, able to move into the market place and realize a good salary. It should also be noted that all boys in Taiwan must, upon completing their degree or, serve two years in the military.

Any institution needs to demonstrate its usefulness to society if it is to continue to be supported financially and through tuition. A commercial high school is not an institution which young people are obligated to attend, but in Taiwan the trend is that a greater segment of the population is willingly seeking admission to various commercial high schools throughout the island. It may be argued that enrolling ever greater percentages of young people is a social good, because the more people are exposed to learning and to commercial education the more likely it is that intelligent, skilled, and sensitive leaders will emerge from them. If intellectual ability in the population of any society is distributed on a probability basis, intelligent people will come forth when more are given access to schooling.

By that line of reasoning, a highly restricted educational system runs counter to social development, economic progress, and political stability. Therefore, we can argue that the value of the Taiwan commercial high school is multifaceted. It is seen by parents as a way of insuring their children's financial and social happiness. It is seen by students as a method to bring honor to their families and to continue their learning, peer relations, and their social interactions. And it is seen by society as a way of improving the leadership and also the work force, both of which translate into stability, economic success, and a population that has an investment in the continuance of harmonious living and individual self-actualization.

When one visits the commercial high schools of Taiwan, it becomes evident

immediately that an agenda of the educational authorities in Taiwan is the prolongation of the childhood experience. All students attending commercial high schools are required to be in uniform, have their hair groomed in an appropriate way, to be well-kept in cleanliness in both their persons and their clothing, and to treat their educational experience in a respectful manner. Discipline is not a significant problem in Taiwan education. Students seldom miss class unless they are seriously ill or have a family emergency. All of the students gather in the morning for opening exercises and then proceed to their homeroom, where they collect their books and thence go to their first morning class. Socializing before and after school is very popular with the junior college students; however, dating, expressions of affection, smoking, boisterous behavior, and fighting are all treated as inappropriate.

During the first three years, students are discouraged from dating by school authorities. In their final year in the commercial high school model, evening activities such as attending movies, going to parties, or enjoying dinner in a coed educational environment are accepted. However, there is a strong prohibition against being in school uniform and displays of affection between the boy and girl students. Each student uniform not only indicates the commercial high school that the youngster is attending, but it also gives his identification number and his name. These are displayed on the left-hand side above the pocket on either the shirt or the jacket that must be worn. Should misbehavior occur, even after school hours, the child may well be reported to the college authorities. The assistant principal of discipline will then act in accordance with school policy.

The most feared punishment is, of course, expulsion. There is no forgiveness factor in Taiwan education. By this I mean that, should a child be expelled from any school, his chances of ever returning to that school or any other school is nonexistent. Because of this

and the social stigma that is associated with expulsion, it is very rare that a child will be caught behaving inappropriately while in uniform or in areas adjacent to his institution. An interview with students at Ping-Tung Commercial High School suggested that proper behavior is never in question. In fact, the third-year students with whom I met told me that no student, to the best of their knowledge, had been suspended from his or her program because of discipline or misbehavior.

In order to be admitted to the commercial high school, a boy or girl, after completion of his or her ninth grade of compulsory education, sits for a two-day national examination. These examinations are held at the various locations throughout the country and are monitored by paid personnel, who rigorously enforce the no cheating and time constraints on the exam. July is the month when the commercial entrance examination is held. The reason for this is quite simple: By that time boys and girls know if they have been accepted at the prestigious academic high schools. Only those who (1) were not accepted at the high school or (2) were academically sound could compete for admission into the commercial/vocational/technical system. I believe it is correct to say that those children accepted into the traditional academic high school were the elite 20 percent of the nation's teenagers. This does not suggest that other pupils are not as bright; it does indicate the importance of understanding how to take highly competitive examinations. The academic high school examination is given in early July, and the score is turned around to the student within one week, which gives him ample opportunity to register for the national commercial high school examination. Should the student not pass the national examination in July, options decrease significantly and, basically, the child will be relegated to programs that are not as academically oriented or rigorous as is found in both the traditional high school and the commercial high school.

The admission examination to the commercial high school consists basically of four fields: mathematics, Chinese, natural sciences, social sciences -- including Chinese history, geography, politics, San Min Chu-yi (Three Principles of the People)-- and, lastly, English. The numerical score achieved on the examination dictates acceptance.

Unlike the Chinese academic high school, the commercial high school in Taiwan is a much more scholastically relaxed, competition-free environment. Admission to the academic high school after the ninth year, as I have shown in my previous studies, particularly Middle Education in the Middle Kingdom (1996), presupposes a desire for matriculation into the university. Therefore, the sole focus of the test-based academic high school is to qualify, upon graduation, for admission into an institution of higher education. This, by the very definition of the commercial high school, is not its mission; therefore, students admitted after the ninth grade to the various commercial high schools throughout the island of Taiwan do not have as their main focus the Joint College Entrance Examination, which is given to their traditional high school counterparts in the summer after their twelfth grade. A much more relaxed, somewhat carefree atmosphere is seen on the campuses of the commercial high school. A recent visit to Ping Tung Commercial High School in the southern part of the island suggests to me that the students, though diligent in their studies, do not feel stress over career-threatening examinations which prefigure moving to a higher level of academic life.

Stated succinctly, once a child is admitted into a commercial high school, he need not be concerned with another national examination unless he is one of the minority of students who chooses to continue after completing his three-year program. As I have indicated earlier in this study, a very small percentage of women and an men are able to make the transition from the commercial high school to the four-year baccalaureate

university system.

The commercial high school curriculum in the modern schools in Taiwan consists of two unique parts. The first is the academic component; the second, the professional component. During the initial year at the commercial high school, the student's course requirements are almost identical to those that would be found in the academic high school. They would include algebra, geometry and some trigonometry, computer science, general science, Chinese, and English. One other class is frequently included in the first year experience (i.e. the 10th grade) and that class is related to the student's major. During the first year and the second year, homework, though required, is significantly less than what is demanded at the middle school (grades 7 through 9) or at the highly competitive academic high school. According to interviews with numerous students, instructors will assign homework nightly; however, because of study hall opportunities, much of this can be done during school hours. The only time that there is a frantic pace of behavior related to homework seems to be when examinations are periodically given throughout the year. Students then are likely to spend 15 and 18 hours a day on their studies immediately before the examination process begins.

The students arrive at school at about 8:00 A.M. and go to their homerooms, where they will leave their knapsacks or attache cases. They are required to wear uniforms, most of which are fairly drab in color. I have noticed that blue, khaki, gray, and black tend to dominate uniform choices in Taiwan. A white shirt and a tie is required of the boys, and the girls must wear an appropriate light-colored blouse with their skirts or slacks. As I mentioned earlier, the name of the school, the student's identification number, and the student's name appear on both the shirt and sports jacket that is worn. Uniforms are considered important in Taiwan education. The main reason is that the uniform obfuscates

family wealth in that poor children and rich children dress the same, and it also brings about pride in school attendance in that the uniform becomes a symbol of having been accepted at an institute of advanced learning.

Class time is at 8:20 A.M. On various days there are assemblies in the central courtyard of the school. These are for students in different major fields of study. Classes begin smartly at 8:20 and the first class lasts for approximately 45 minutes. There is a ten- or fifteen-minute break where the students are encouraged to go out of their classroom into the central courtyard and to socialize, exercise, and have fun. This tends to work well in relieving the great stress that is associated with the intensive academic work required at the commercial high school. Classes end at 4:20 P.M. and, on occasion, there will be a major speaker who will address all of the students at the school in the central courtyard for fifteen or twenty minutes.

During their free time before classes begin and throughout the day, as well as after the final class at 4:20 P.M., sporting activity within the confines of the school grounds is encouraged. Basketball appears to be the most popular recreation, followed by volleyball, soccer, badminton, ping-pong, and touch football, as well as Frisbee throwing. It is expected that each commercial high school will plan its facility adequately to assure that youngsters have places to recreate within the confines of the school grounds. Interviews with students at numerous institutions throughout Taiwan suggest to me that students relish the recreational time they have with each other.

Children normally arrive home by 6:30 P.M. A small percentage, approximately 20 percent, of the commercial high school students in Taiwan have some type of employment, either with fast-food restaurants, gas stations, delivery services, or family businesses, external to their school experience. However, because of the status that accompanies

being a commercial high school, most of the kids are not required by their parents to work. It is the expectation of the family that the child will perform well in his academic and professional courses, that he will make friends who can assist him in business and social life in the future, and that he will remain out of trouble and be involved with family activities in his out-of-school time.

Lunch is purchased at the school. Children are not allowed to go home but must buy their Chinese food in the school cafeteria. The typical lunch would be soup, rice, chicken, fish, three or four green vegetables, and perhaps one or two selections of fruit. In some schools tea was available; but, in general, it was expected that students would bring their own beverages with them from home. The food is nicely prepared, the cafeteria environment is clean (if somewhat noisy), and the students seem to enjoy dining together in that atmosphere. The price for lunch ranges from US$1.00 to US$1.50 per day, and students may return for second helpings of rice and soup. Because of the large number of kids in attendance at most commercial high school, two or three, or even four lunch shifts are held to accommodate all of the student body.

At some schools, a fifteen-minute after-lunch time is built into the schedules so that the students may nap at his desk. This is a common tradition throughout Asia and seems to have an energizing effect on both the faculty (who nap in the faculty lounge) and the students. Other schools that are much larger have not brought this into their schedules.

Little changes academically for the students through the first year: The great emphasis remains on academic subjects. The curriculum parallels very much the traditional high school, with Chinese, mathematics, English, computer science, natural science, and social science being the focus of their studies. During this first year, very few of the youngsters attend "bushi-ban." Bushi-ban can be defined as after school classes in which

professional educators tutor small groups of students for money. Those in the commercial high school who do attend bushi-ban normally focus on English, which, according to interviews with 120 students, is considered the most difficult of the required classes. There are two reasons: Many of them feel that they will have, at some time in their academic or employment life, the chance to travel to America, either for continued study or for employment opportunities. The second reason is that, even though English is an alien language to the Chinese, successful completion of this most difficult course of work is required for graduation from the tertiary system.

Each year becomes more challenging for the student. Mathematics moves from algebra through geometry and trigonometry into calculus, as the years progress. One interesting change does occur after the first year: The emphasis shifts slightly from the academic track to the professional track. That is a student studying business management will take only one or two classes in these fields during his 10th grade. By the time he is in grade 11 and then 12, more than half of his energies are devoted to this major, which was selected and based on his examination test scores and his choice of fields of study. I found interesting the high level of satisfaction experienced by the students who are attending the various commercial high school in Taiwan. A random interview with 50 commercial high school students from their first year through their third year indicated that eighty percent were very satisfied with their education, their school, their teachers, and the social life that was part of their academic schooling. Fifteen percent were moderately satisfied and felt that they had selected or had been put in the wrong area of training, and five percent expressed disappointment in that they believed that their expectations had not been realized and that the school was not training them adequately. The final five percent seemed to suggest that, had they taken a different major area of academic preparation and

professional study, they would have been more satisfied. During the third year most commercial high school students take field-based internships in their major which is also the career they hope to pursue. Credit is granted for this experience.

Upon completing the third year, the children in the commercial high school of Taiwan, most of whom are in their early 19-20, must make a decision: (1) Do they seek employment in the dynamic economy of Taiwan, or (2) Do they continue their education through highly focused training programs that give them an advantage in areas such as computers and the sciences, or (3) Do they seek admission into a college or university? For economic reasons, most students select option (1), i.e. they attempt to gain meaningful employment. However, an increasingly larger number are seeking options (2) and (3).

The Ministry of Education has in recent years set up mechanisms whereby a boy or girl graduating from a commercial high school may sit for an examination and matriculate into four year technical colleges. This trend has grown significantly in the last ten years. Prior to that time, commercial high school graduation was seen as the tertiary experience for the youngster. Now, with the strengthened economic system in Taiwan and the strong desire of youngsters to continue their education, mechanisms by way of examinations are in place for youngsters to matriculate upward. Few avail themselves of this new opportunity.

Each commercial high school in Taiwan has a slightly different focus in its professional training. All have basically the same requirements for the first year; after that, a youngster moves more into his major or professional field. Schools throughout the island have slightly different areas of focus and each is recognized for its strengths.

Virtually all of the commercial high schools in Taiwan have both a day school and a night school program. The day school program, which lasts from approximately 8:00 A.M.

to 4:30 P.M., is slightly more difficult to be accepted into than is the evening school program. At the typical commercial high school, three to four times more students attend the day program than the evening program. Though the curriculum is quite the same, the number of hours spent in class each day is slightly less and, therefore, students annually attend more days of class. Incidentally, alternate Saturdays are school days in the commercial high schools of Taiwan, and students are expected to be there at 8:00 A.M. Evening students do not have this obligation on Saturday, but they must make up the time by attending an additional year of study. Evening classes begin at 6:20 P.M. and end at 10:40 P.M. (Approximately 22% of the commercial high school students take the evening diploma program).

Taiwan still remains a relatively safe environment for youngsters to travel to and from school both in the evenings and in the days. The public bus system throughout the island, in both the urban and the rural areas, is used almost exclusively by the Taiwan junior college students to get to and from school. Some continue to ride bicycles if they live near their commercial high school..

The commercial high school in Taiwan are controlled , in general, by the Ministry of Education, as are all other institutions of learning. Some commercial high schools are public, the others are private. The curriculum of each is similar; however, private schools do charge more tuition and, as a rule, do not have the high status that the national and public commercial high schools have. The government schools are better funded, their libraries are more comprehensive, classes are smaller, and the teachers are considered to be somewhat better, as are their salaries.

The administration of a commercial high school is under the leadership of a principal, an assistant principal, a director of finance, a director of curriculum, a director of

discipline and moral development, and a director of military science. Each department has a chairwoman or chairman who is, frequently, the senior individual in that department. The faculty members of the commercial high schools in Taiwan frequently have the baccalaureate degree: Some 15 percent have a master's degree. Many have had business experience which they carry to the classroom. All are licensed by the Ministry of Education in their field of expertise.

Libraries at the commercial high schools tend to be rather small and made up, basically, of journals, encyclopedias, reference magazines, and other standard items. Works of literature, philosophy, foreign languages, and books for leisure reading are not normally found in the libraries.

Textbooks, which cost the commercial high school student about US$200 per year, are the main required reading. These are generally carried in large knapsacks to class each day and are used in coordination with lectures and group projects. The textbooks are, as a rule, fairly plain paperback items, and they are usually accompanied by a workbook with questions that must be answered and which are coordinated to the various chapters in each of the books. Each subject can have three or four paperbacks and three or four coordinated workbooks. An interesting feature of education at the commercial high school level is that the books are standardized by the Ministry of Education. Only a few of them are from other countries. A great deal more attention is placed on the instructors, blackboard graphs, and oral lectures than on the textbook material, i.e. the topic is used to supplement other more creative activities in both the classroom and the laboratory.

Students are also encouraged to keep a journal of their academic activities and to keep a comprehensive calendar of required assignments, dates due, and other matters that are pertinent to their schooling. Both the notebooks and journal, as well as the

coordinated study guides, are reviewed regularly by the various instructors. Students who do not complete their assignments in a timely and efficient fashion are reprimanded. The reprimand is normally public, and the student's classmates hear about his deficiency. This, of course, creates a loss of face in the student, but does tend to encourage him to prevent the same behavior from occurring a second time.

One hundred and sixty two credits are required to graduate from the three-year commercial high school in Taiwan. This number, as well as the curriculum and the configuration of courses, is closely controlled by the Ministry of Education and assures that all youngsters have similar educational experiences and learning outcomes.

The teaching technique at the commercial high school in Taiwan is more similar to what would be found in the Chinese high school and Chinese college than what might be anticipated in the Western technical high school or American high school. The lecture method for the conveyance of information tends to dominate the pedagogy during the first year of the curriculum. Teachers stand at the head of the room, a desk in front of them, a podium near the desk, and a blackboard behind them. The average number of students in a class during the first year is 35. The classes are coeducational, and students are seated based on their names.

The classroom is normally very quiet. The instructor enters, the students stand up momentarily, the class leader (usually a student with excellent grades who has been elected by his classmates) acknowledges the presence of the instructor, and then the students sit down. The 50-minute class then begins, normally with the instructor spending a few moments reviewing the previous day's activities; he then starts presenting his lecture. Most students do not take copious notes, but, rather, rely on the paperback workbook and textbook. They jot down in the margins of the textbook information that the instructor may

give which is not covered. Quizzes are frequently held, but are not considered terribly important.

The year is divided into four academic terms, and the only tests that are truly important are the quarterly examinations which tend to be comprehensive in nature. In order for a student to move into the next level of study within a specific field, such as mathematics or English, he must have a satisfactory average at the end of the fourth quarter of an academic year.

Incidentally, the school year at the commercial high school in Taiwan as of 1999 is approximately 240 days. Students attend class Monday through every other Saturday. The year begins in August and ends in July. There are, however, numerous holidays during the year, the major ones being the Chinese New Year break and spring break. October and November seem to have the most number of three-day weekends. This is related to the coincidental fact that patriotic holidays fall in October and November.

Though the lecture method appears to be the most popular during the first three years of the commercial high school experience, other types of teaching are occasionally seen. One could be called the demonstration method. This is particularly prevalent in the computers, whereby the instructor demonstrates to the students a way to develop a program. A third method that is used in English classes, Japanese classes, and occasionally in the social sciences is the small group discussion approach. Students are given an assignment and are then broken down into small groups to discuss their assignment and to report back to the teacher.

A slightly different method is as follows: The children would be given an assignment and then, after they had read their assignment, they would all participate in a discussion of what was read and their feelings about it. From what I saw, this was not totally

satisfactory. Children simply did not want to express their ideas to the teacher. They had been so conditioned by the Chinese junior high schools and elementary schools to be passive learners, with an emphasis on rote memorization, that moving into a seminar or class presentation mode was exceedingly difficult for them in cases that I saw. This should not suggest in any way that the children in the Chinese junior high school in Taiwan are not bright, insightful, and energetic; rather it tells me that the conditioning process that takes place from their first grade through their ninth grade is such that the free exchange of ideas, which we encourage in the West, is not relevant to Chinese education at this time. It might be added that the student respects greatly his teacher and believes that the teacher is a bank of wisdom whose job it is to extend intellectual credit as he, the teacher, sees fit. The students do not believe that they are partners in learning, but rather that they are disciples to the teacher. This is very much the Confucian vision of the relationship that should exist between student and teacher at all levels of Chinese education.

The last two years of the Chinese commercial high school in Taiwan differ from the first year, though not as dramatically as I had first anticipated. Through the first year, the girl or boy student is gradually introduced to his or her major field of study. This process continues until the 12th grade, when a majority of time is now devoted to the major that the student has selected, such as computers, business and commerce, international trade, language studies,, medical technology, management, tourism, etc. During these last two years, a much more practical approach seems to be used at the commercial high schools that I visited. Students majoring in computers spend most of their time in computer laboratories. They are still responsible for continuing their studies in mathematics, the humanities, and particularly English. However, the focus in the commercial high school model now has changed from paralleling the academic high school to specific professional

training (as opposed to general academic preparation) in the student's field of endeavor. Occasionally, experts from industry are brought in to speak to the youngsters who are in a major similar to what the expert does in his real world experience. Internships are taken by most students. These frequently lead to jobs at the company where the internship is taken.

Upon graduation from the commercial high school, the student is helped to find a job by the school, various employment agencies, newspaper ads, and contacts he or she has made through family friends or personal acquaintances. Those youngsters who do not wish to continue their formal education will frequently try to find employment immediately; however, it should be noted that all of the young men do have 20 months of obligatory military service unless they are immediately accepted into a university or baccalaureate-level college. Only a small percentage matriculate into a traditional university setting. However, conversations with leaders in educational reform and members of the Ministry of Education suggest that the commercial high school student, after he finishes his program, will, in the future, have greater access to admission into a university, academic college or technical college.

Interestingly students completing the commercial high school in Taiwan have a higher beginning salary than students completing the more rigorous academic highschool.

According to the Ministry of Education graduates of the commercial high school can earn 20-30 % more than their academic high school counterparts. The Ministry also points out that after seven years those who went to the academic high school have greater earning power than those graduating from the commercial high school. Life time earnings are also higher for those who ended their formal education with a diploma from the academic high school. (Interview, Ministry of Education, June 1999)

It is a goal of the Ministry of Education and the central government that, of those youngsters attending institutions of higher learning, only 35 percent will attend and graduate from traditional academic colleges and universities with a four-year baccalaureate degree. Fifty-five percent will finish their tertiary education at a commercial high school, a vocational /technical center, or some institute in Taiwan that allows them to move into the expanding commercial, and industrial base that are providing the financial strength to the island province of Taiwan. Ten percent do not continue schooling after the ninth grade.

An interesting feature that I have noticed while doing this research is the de-emphasis on homework activity at the Taiwan commercial high schools. In junior high school and in the academic high school, it is expected that the child will do three to four hours of home study six evenings a week. This is prescribed by the Ministry of Education and, in accordance with this, the child is given homework that, on the average, will require this many hours for it to be successfully completed. Slower children may need more time; gifted children, less time. However, careful analysis does suggest that there are definite hours that correspond with academic achievement and completion of homework. Much to my surprise, only the first year of the Chinese commercial high school in Taiwan seem to require extensive homework completion. The last two years appear to be configured so that the child may finish his assignments during study hall and library time on the actual campus.

The Chinese commercial high school in Taiwan is required by law to have significant space for both academic and social activities. This is not a problem in the more rural and suburban areas; however, in the large cities of Taipei, Taichung, and Kaoshiung, having adequate space to accommodate between 2,000 and 4,000 students is problematic. The physical facility that forms the commercial high school campus is quite the same at all the

institutions visited. A front gate is the major access point to the campus. Stationed at the entrance is a uniformed security guard, who assures that only students and other authorized personnel are allowed onto the campus.

The total campus in all of the schools visited is surrounded by a high stone wall, perhaps ten to twelve feet in height. This is characteristic of not only the commercial high school but of all educational institutions in Taiwan. Not only does this wall physically separate the students from the outside environment, it also symbolizes the specialness of the campus and the fact that these young women and men are not part of the general population, but rather have a special relationship with society that entitles them to extended schooling.

I will not burden the reader with describing in detail the campuses of the commercial high school in Taiwan, but will make this very general statement: All of those visited by this writer were in excellent repair, beautifully landscaped, and immaculately clean. I was deeply impressed with the pride that the students, faculty, administration, and service personnel take in assuring that the campuses, are beautiful facilities in which the people of the island can take great pride. Commercial high schools in modern Taiwan will continue to have a powerful impact on education, economics, and social mobility.

At the heart of any educational system is the curriculum. Curriculum, as used in the context of this book, may be defined to mean a "collection of courses that when studied give the student a body of knowledge, a sense of values, and techniques and abilities. The courses are offered and arranged in such a manner that the program which they form becomes synergistic, interrelated, and holistic."

Two schools of thought tend to dominate the field of curriculum scholarship. One

suggests that it is most imperative for the student to be steeped in academic subject matter. Courses in mathematics, science history, language, and the other arts, humanities, and science-oriented courses, this first group of educationalist believe, are what make a strong curriculum and that pedagogical techniques will appear quite naturally if a student is well versed in his academic disciplines.

The second view, and the one that tends to prevail today, suggests that the ability to perform at task is really more important than having advanced training in a highly academic subject area. This group of scholars, most of whom took their degrees in education and were influenced by the utilitarian-instrumental school of thought that dates from the William James/John Dewey era, dominated the hierarchy of education. Many of these scholars are in leadership positions in Taiwan's education system and are products, at the doctoral level, of prestigious schools of education in the United States.

This dichotomy has been with the field of educational philosophy for many years and there seems to be no correct answer to which will prevail in the education of children - academic or practical training. A meld of the two is, of course, the ideal; however, reaching the perfect balance of academically oriented subject matter classes with courses that are intended to make good workers is still clouded by the subjective values that scholars hold, based on their own academic/philosophical orientation and the literature that is currently dominating the field of education and its true mission.

In the establishment of a curriculum for any educational setting certain presuppositions are made:

1. Human culture is learned, not biologically or metaphysically inherited.
2. The human mind and spirit are plastic.
3. Younger generations are incapable of survival, as we know it, much less of developing mature social values without education.
4. A relationship exists between what is taught (input) and the student's moral

and intellectual behavior (output).

5. It is in the best interest of a nation to create learning experiences that contribute to the social good and enhance the concept of pride in one's self.
6. A fundamental progression takes place in learning from the simple to the complex.
7. The arrangement and organization of learning activities is essential if schools are to have more than a maintenance function.
8. A common base of information, generalizations, assumptions, and ideals is necessary in a society if progress and harmony are to be enhanced.
9. Learning is most effective if the student senses a relevance in his subject matter.
10. Older scholars and educators are better equipped than students to determine what students should learn, how they should learn, and in what sequence learning must take place.

(Derived from separate research done by Douglas C. Smith, 1981-82 and 1997).

A curriculum is indicative of a number of things: It tells the researcher what a society values as skills and behavior roles of its young; it suggests how developed a school or college is; it shows where a society places greatest stress; it allows one to judge behavior modifications that are anticipated; and it suggests not only the history of a nation or society but also what the leadership wants the populace to be like in the future. A curriculum is the brain of an educational institution in that, theoretically, only those items covered in the formal learning process will be absorbed by the student. It is fallacious to assume that forces outside of the school do not interface with the learning process in the school; the development of curriculum makes no allowance for this supposition and therefore becomes a prototype of the society and the mind-set of the educated class.

Perhaps the best way to discuss the specifics of the curriculum found in the modern commercial high school is to outline one of the seven majors that may be taken. These seven major fields of study at the commercial high school are: accounting, business management, tourism, international business, language and translation, hotel and restaurant administration, and data management and entry.

The following shows the courses taken, the hours of contact, the year the class is offered and other relevant information. The major I am selecting (due to its popularity)is accounting.

Accounting at the modern Commercial High School in Taiwan, 1999

This field of academic/commercial study is currently among the most popular with the students attending the 106 commercial high schools in Taiwan. The materials presented below came from the Ministry of Education, Department of Vocational and Commercial Education and may be found in a publication title: Commercial High School Curriculum: Accounting (1998).

This booklet, plus the six others, present, in great detail all aspects of the seven fields of study currently available (1999-2000). They are written in Chinese and were made available to me by colleagues at the Ministry of Education in Taipei. Under normal circumstances these curriculum guides (which are costly to produce) are not available to the public: rather they are for the principals and academic leaders at the commercial high schools in Taiwan as well as government leaders who have involvement with tertiary education.

Accounting

Accounting as a major
Year One, Semester One:
(Sophomore year 1)

Classes	Hours
Chinese	4 credit hours
English	2 credit hours

Math	2 credit hours
Science	2 credit hours
Philosophy	2 credit hours
Music	2 credit hours
Calculator	2 credit hours

Courses in major:
Business 1 (2 credit hours)
Accounting 1 (4 credit hours)
Semester 1= 27 credits

Year One, Semester Two:
(Sophomore year 2)

Classes	Hours
Chinese	4 credit hours
English	2 credit hours
Math	2 credit hours
Philosophy	2 credit hours
Art	2 credit hours
Calculator usage	2 credit hours

Courses in major:
Business 2 (2 credit hours)
Accounting 2 (4 credit hours)
Semester 2= 27 credits
Total credit hours for first year: 54 credits

Year Two, Semester One
(Junior year 1)

Classes	Hours
Chinese	4 credit hours
English	2 credit hours
Business Math	2 credit hours
Taiwan History	2 credit hours
Law and Society	2 credit hours

Courses in major:
Accounting 3 (4 credit hours)
Economics 1 (3 credit hours)
Storage and Retrieval (2 credit hours)

Elective class in major (3 credit hours)

Year Two, Semester Two
(Junior Year 2)

Classes	Hours
Chinese	4 credit hours
English	2 credit hours
Business Math	2 credit hours
World Culture	2 credit hours
Social Psychology	2 credit hours

Courses in major:
Accounting 4 (4 credit hours)
Economics 2 (3 credit hours)
Elective credits in major (8 credit hours)
Total credit hours for Second year: 54

Year Three, Semester One
(Senior Year)

Classes	Hours
Business Chinese 1	2 credit hours
English Conversation 1	2 credit hours
Business Psychology	2 credit hours

Courses in major:
Accounting 5 (4 credit hours)
Cost/Capital Accounting 1 (4 credit hours)
Business tax and Accounting 1 (3 credit hours)
Computer Accounting Software (2 credit hours)
Elective credits and/or field placement (8 credit hours)

Year Three, Semester Two
(Senior Year II)

Classes	Hours

Business Chinese	2 credit hours
English Conversation	2 credit hours
Man and Environment	2 credit hours

Courses in major:
Accounting 6 (4 credit hours)
Cost/Capital Accounting 2 (4 credit hours)
Tax regulation in Accounting 2 (3 credit hours)
Computer Accounting Software 2 (2 credit hours)
Field base/occupational experience (8 credit hours)
Total credits for third year: 54

To graduate from the commercial high school a minimum of 150 credit hours is required. Each school may add additional requirements as is the case with accounting which requires the student to complete, during his three year at the commercial high school, 162 credit hours.

All of the seven programs of study at the 106 commercial high school are similar in structure/procedure to the discipline of accounting. Each, however, has specific classes directly related to the students' major field of study. Certain class, eg. Chinese, English, philosophy and math, required of all students irrespective of the major that they are studying.

Placement in the dynamic commercial market place of Taiwan for graduates of the commercial high school is excellent with 80% going directly into employment related specifically to their major field of study.

Accounting remains one of the most popular fields: it allows students to enter a variety of commercial enterprises and also gives them both employment and geographical mobility. In 1998 seventy-five percent of the students in this major were women and most (90%) saw the commercial high school as their final stage in formal education.

CONCLUSION

This essay is an attempt to show the relationship that exists between Taiwan's rapid and successful economic development and the value the Chinese people of that island put on education. The vehicle for this theme is a discussion of the commercial high school which has played an important role in Taiwan's economic success.

Also presented are various historical, sociological and ethnological issues that help explain Taiwan's development as one of the most educated societies on earth.

I will end this essay with a quote that articulates the goals and values of Taiwan and the mission of its educative process.

> In the field of thought, scholarships and general cultural concerns the Chinese people of Taiwan conserved, even enhanced the propagation of Chinese traditional values and national culture while it embraced modern scientific civilization of the west to keep with the times. In the process were synthesized the Chinese and the foreign, the modern and the ancient, toward the reconstruction of a new cultural [and educational] system that is most suited for economic and national development. The end result is that tradition and contemporaneity, East and West, and thought and action have all benefitted from studied adjustment and harmonization.
>
> Chin Hsiao-yi in A History of the Republic of China (1981)

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